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# Worldwide Report

**EPIDEMIOLOGY** 

No. 149



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# WORLDWIDE REPORT EPIDEMIOLOGY

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# NATIONAL HEALTH CAMPAIGN PROGRESS REPORT

Algiers REVOLUTION AFRICAINE in French 30 May-5 Jun 79 pp 42, 43

[Article by Wahiba B.]

[Text] The national hygiene and health campaign is in full swing. We are at present witness to veritable awareness on the part of citizens and a sense of civic responsibility, long dormant, is reviving with the discovery of the advantages of hygiene.

Created 2 weeks ago, the Governorate Hygiene Commission is conducting a comprehensive operation and noticeable results have already been recorded. The mission of this commission is to decide on the campaign's general orientations, to verify and coordinate the communal programs and, finally, to assist rank and file units in finding solutions to the problems that may arise at their level.

The commission, chaired by Mr Youcef Briki, a member of the CNP [National Party Commission] and secretary general of the UCTA [General Union of Algerian Workers (Governorate Union), is composed of representatives from the Algiers People's Council, the federations and kasmas, the APC [People's Communal Assembly] the mass organizations, the DGSN [Directorate General of National Security Security Services and those organizations particularly affected by this action (landlord organizations, national companies,...). It is worth noting that, with the creation of this new commission, permanent organizations have been established which in future will have to assume responsibility for and resolve - resorting if necessary to coercive measures - all problems relating to the hygiene, health and security of citizens and public places. In order to more effectively solve these problems, the commission has chosen to subdivide itself into three subcommissions: one charged with the restoration of the Casbah, the Subcommission for Information and Sensitization and the one charged with the application of the rules. Another decision made by the commission aims at creating communal commissions that will supervise the proper application of Governorate Commission directives. They will also have to assume the initiative on the basis of a work program that should be deployed up until the eve of Ramadan.

Furthermore, during the first week of operations, enlivened by several meetings, the commission particularly tackled organizational chores and an analysis of the work program submitted to it by the subcommissions. This will enable it to better follow the carrying out of operations in the field.

The Active Phase

Thanks to meetings held every Tuesday at the CNP, these subcommissions will have to report on the work undertaken by the rank and file groups and other subcommissions. It is also their role to decide on the following week's program.

Now entered into its active phase, the commission has sent a note to all the communal commissions, explaining the short-term guidelines for the job to be done. This has to do with regular household and "special" garbage collection, the latter requiring marginal collection (household rubbish, scrap metal or other kinds). Also, a pickup route will be established with collections scheduled for specific days and times. This short-term action program will also deal with the disinfection of public places (gardens, sidewalk cafes, etc.) and of certain means of transportation (buses, taxis, etc.), the resurfacing of shop fronts and the banning of peddling in public places (ice cream, trinkets, etc.), including also the ban on unauthorized stockraising in the capital or its immediate vicinity. In connection with this, rigorous supervision of stables will also be guaranteed. Also included in these initial campaign activities are cleanup operations directed at homes and house cisterns, purification and analyses of water supplies, extermination of rats, etc. Otherwise, as for the long-term work program, the commission has decided to take "Operation Casbah" in "hand" itself. Already in progress for a week now, the program for cleaning up this historic site, the Casbah, but which at present is faced with serious problems, involves several different projects. And the efforts of the volunteer organization being formed in the Casbah is no more than a means for conducting the reconstruction which the "Casbah Workshop," composed of five companies under the supervision of the Ministry of Housing, has undertaken,

In the immediate future, campaign organizers will be tackling urgently needed actions like the collection of leftover bread, the weeding of cemeteries, etc. To attain the anticipated objective, these urgently needed operations require the effective participation of neighborhood residents as well as of party and mass organization militants. Similar volunteer organization operations are being organized throughout the Governorate of Algiers.

# Toward Collective Awareness

All the suggestions made at earlier commission meetings and by almost all federation representatives present gravitate toward one common idea: All the plagues inherent in a lack of hygiene escape the attention of no one. This is something we have more than learned. And this is why, without collective awareness combined with the will to take better action in order to live better, which constitutes a first step in cleanup campaigns, we can

only achieve continuous, positive results or organized coordination of our efforts if they are produced by the authorities or citizens.

At a meeting recently held at Algiers Governorate CNP headquarters, all participants and in particular the members of the El Harrash Federation Council agreed that the major obstacle is the lack of water. For, as one of the participants rightly emphasized: "Sure, we would like to clean up, but with what?" Among the operations currently being conducted in El Harrash, the industrial zone of Wed Smar and in Baraki, important steps have been taken to find and repair breakdowns and leaks. For, let us not forget that there is water and in large quantities. It is the deterioration of a well, a cistern that results in a breakdown. Furthermore, the early phase of this campaign would have been a complete success had it not been for the unusual 2-day interruption in the water supply that occurred in the El Harrash daira.

Moreover, this situation "runs smack into" another major problem, the one posed by the "Guelta." Despite the fact that it has been sulphated many times, this lake situated on the former Rue d'Aumale (when you go toward L'Arba), stagnant throughout the year, remains a veritable breeding ground for germs. Every year, a dozen cases of bilharziasis are reported following apparently harmless swims. This disease, which young children are particularly susceptible to, is incurable and years later produces active infection, the consequences of which can result in death. Apparently, the singer, Abdelhalim Hafez was infected by this disease. This year, the authorities have decided to fill in this ditch with rubbish and clear the site, and appeal to everyone to help them dump all the debris into the Guelta.

To accomplish this, the APC, in collaboration with the ANP [People's National Army], has already set up bulldozers to organize the dumping operation.

# Order of Priorities

The Baraki region has just as many problems. The authorities and volunteers are at present on the spot and are tackling various cleanup operations by first attacking those neighborhoods most in need. Along with collection of garbage, scrap metal, etc., APC technical services have started clearing a playground for the young people, who do not yet have anything like that in Baraki, and are repairing some roads. In this area, the housing problem also dramatically confronts us, especially when we consider that 5,000 families now live in Baraki which, built on flat ground, is almost on a par with Wed El Harrash.

As in the Casbah, here too countless shantytowns have sprung up. There are 14 Casbah-sized tenement blocks for some 300,000 residents living under miserable conditions, without water, without electricity, without roads.

But there is still hope because, begun a little while ago, the program for Operation Clean Up the Casbah is already bearing fruit.

But on the other hand, since information and sensitization constitute the most important phase of the campaign, only everyone's massive participation can guarantee its success.

And we know that a cleanup is not only a question of block or street hygione, but above all a matter of education that begins at an early age.

No doubt this undertaking will be a lengthy one, but it will achieve the objective that has been set for it. For, in light of the suggestions offered

by the commission during earlier meetings, one common idea emerges: Cleaning up has become a matter automatically linked with the daily acts and gestures of the citizen. And therefore hygiene must form part of the present-day environment of Algerian society. And it is just as true that any success in any field is above all dependent on a healthily and regularly organized life style for individuals as well as for societies.

11,466 CSO: 5400

# MALARIA EPIDEMIC CONTINUES TO CAUSE CONCERN

Guayaquil VISTAZO in Spanish 15 Jun 79 pp 82-85

[Report on interview with Dr Victor Manuel Reyes, a malariologist who has served for several years as head of the National Service for Eradication of Malaria, by Augusto Galarza: "The Specter of Malaria Returns"; date and place not given]

[Excerpts] Paludism or malaria was thought to have been eradicated in the country. However, during the past few months outbreaks of malaria have occurred in several locations, such as Santo Domingo, Quevedo and San Lorenzo, as well as in certain inter-Andean valleys, such as the Yunguilla, in Azuay. In order to discuss this significant topic, we interviewed Dr Victor Manuel Reyes, a malariologist who has severed for several years as head of the National Service for Eradication of Malaria [SNEM].

The epidemic has occurred violently in San Lorenzo, with a death toll among the child population. Despite the anti-malaria campaign, there have always been areas with constant transmission. Recently, the greatest incidence of malaria has been in the provinces of Esmeruldas and Napo, occurring in the former with the greatest intensity in the Eloy Alfaro and San Lorenzo districts. The spread of the disease is fostered by the characteristics of the damp, tropical, jungle area, the increasing agroindustrial development through a process of uncontrolled colonization, unstable housing and floating population groups resulting from the exploitation of lumber and its processing, as well as the development of the area of petroleum exploitation.

This zone contains 70 percent of the population of the malaria area (291,793); while 3,800,249, or 92 percent of the population, are located in the rest of the malaria area. It should be pointed out that there is insufficient supervision, a lack of health education activities in the communities, a lack of studies on human behavior in connection with the transmission in areas where it is constant, an inadequate budget for meeting the current needs of the program, and a lack of professional technical personnel, especially on the zonal level, where the vacancies cannot be filled because the current salaries do not constitute a financial incentive.

The SNEM must coordinate with the agencies responsible for the execution of engineering projects, such as irrigation works, communications routes, etc., so as to prevent the transmission of malaria from becoming established in uncontaminated areas or a workering of the existing problem. It is time

for the local authorities to assume responsibility for the situation, for example, by eliminating garbage and taking care of the sewers which are focuses for breeding mosquitoes, etc., so as to prevent the city of Guayaquil from being invaded by malaria infection.

The country's geographical status alone, and the understanding of the disease gained through the anti-malaria activities which preceded the new structure were sufficient to demonstrate the leading position occupied by malaria among the main causes of death, and the impact that it has had on an economically active sector which is the chief component and promoter of agricultural development. It has been over 20 years since the battle was started on all the known fronts and, despite the achievements that have been accrued, there is still the threat that malaria may become a scourge again.

Elsewhere in our conversation with Dr Reyes the dialog took place as follows:

[Question] How is malaria diagnosed?

[Answer] Through a microscopic examination of a blood sample (thick drop). The Malaria Service keeps informed on the presence and evolution of malaria in the country by obtaining blood samples from those suspected as victims (with fever), taken free of charge by a system of 5,591 volunteer collaborators and 409 public health employees. In 1978, with the use of this system, 190,133 blood samples were taken, from which information was obtained on 74.2 percent of the localities existing in malaria areas. This enabled us to discover and diagnose 8,154 cases of malaria. The total number of slides examined by the SNEM laboratories was 303,138, and the total number of malaria cases was 9,815; which shows that the voluntary collaboration, including the public health units, discovered 83.1 percent of the malaria cases for us.

[Question] What is the SNEM doing to combat malaria?

[Answer] In 1969, and as a result of the suspension of the spraying operations (1965-68), malaria spread in the country, and 51,000 victims were diagnosed. The real figure was estimated at about 100,000 in view of the inadequate system for finding cases. A plan devised in 1966 with the participation of PAHO [Pan-American Health Organization]-WHO [World Health Organization] and IAD [Inter-American Agency for Development] made it possible to resume the operations; the latter consisting of spraying DDT among residences, covering an average of 250,000 homes per year. This plan was carried out despite the termination of the UNICEF contributions in 1973, and those from IAD in 1974. Since then the program has been financed by the national government (with 88,584,000 sucres in 1978). Anti-larvae control has been carried out in some cities, and there have been collective treatments with associated drugs in weekly doses for 8 weeks (in the eastern province of Napo) and, starting in May of this year, in the San Lorenzo district.

[Question] In which areas could malaria appear again?

[Answer] The methods used for battling it have eliminated malaria from the nation's leading cities and from a large portion of the rural area; but it has been impossible to eliminate the vector mosquitoes, which is why infection could recur with the frequent entry of victims. To prevent this from happening, constant epidemiological vigilance is maintained (including a study of the density of the mosquitoes); and, when focuses appear, immediate action is taken. In some cities, such as Guayaquil, it is thought that the vectors might be eliminated by a well devised plan for urban development and sewage service. This plan could be carried out in parts, based on the current features of the city.

[Question] What is required to eradicate malaria from the country?

[Answer] Based on the recommendations from the latest evaluation made of the program, the most important measures are:

- a. To increase the budgetary appropriations for operating expenses, renovation of the transportation facilities, etc.;
- b. To execute plans with the neighboring countries in the border areas which are considered to have an epidemiological influence;
- c. To make studies on the resistance of vectors to insecticides, and of the disease (parasites) to anti-malaria medicines or drugs. We now have a team in the settlement of San Lorenzo, where strains of P. falciparum have shown up which are resistant to chloroquinine (in Colombia);
- d. To solve the labor problems which have a negative effect on the fulfillment of work goals and on the campaign type discipline that is required by the programs wherein the orders are vertically issued.

2909

# TYPHOID FEVER OUTBREAKS INCREASE

# Outbreaks in Various Zones

Quito EL COMERCIO in Spanish 15 Jun 79 p 24

[Text] Guayaquil, 14 June--Although the health authorities claim that it cannot be called an epidemic, typhoid appears to be turning into a problem that is affecting several areas of the country.

A high-ranking health official stated here that, in order to call it an epidemic, there would have to be at least 50 persons stricken out of every 100,000 inhabitants; whereas, in Guayaquil, only about four out of every 100,000 persons have been found to be affected. However, he acknowledged the need to adopt forceful measures to prevent the outbreak from spreading.

Cases of typhoid have been discovered in Guayas, Pichincha, El Oro and some other areas.

According to press reports, an additional 19 cases have just been detected in Esmeraldas Province.

The authorities are mainly appealing to the public to refrain from eating prepared food sold on the streets, under very poor cooking and distribution conditions.

There was a case of a youth who consumed one of the so-called "bolos," the well-known soft drinks made with ice; and, a few hours later, he had to be taken to the hospital with clearcut symptoms of typhoid infection.

# Cases in Guayaquil

Quito EL TIEMPO in Spanish 14 Jun 79 p 5

[Text] Guayaquil, 13 June--New epidemic outbreaks of typohoid have been discovered, this time south of the city, particularly in the Cuba slum section and the tenements located near the El Guasmo grounds.

The report was submitted to the Epidemiology Department of the Provincial Health Headquarters by individuals who preferred not to identify themselves. Corroborating the foregoing claim, it was said that several companies located in that area had requested in writing that their employees and workers be vaccinated, thereby adopting safety measures to prevent contagion.

One of the firms which made such a request was "Aluminex," located at 620 Robles Street.

Several Cases

The Guayas Provincial Health Headquarters also reported that, based on the statistics compiled by that office from 31 December to 2 June of this year, there were 151 cases in the port, 83 in the city and another 52 originating in other provinces.

According to the scientific explanation given by one of the doctors at the Health Headquarters, what is involved is a bacteria known as typhoid and also called eberth ellatiosa, which attacks the digestive tract and produces toxins which are absorbed by the intestinal mucosa, causing nervous disorders.

The Health Headquarters announced that a health commission comprised of medical professionals, health educators and mass media experts, among others, is working intensively to carry out a serious of preventive measures against typhoid.

Finally, officials from both the Guayas Health Headquarters and the Education Department are enforcing the regulations in schools and colleges; and the presence of venders of food prepared outside of the institutions has been banned.

# Outbreak in Chone

Quito EL COMERCIO in Spanish 20 Jun 79 p 24

[Text] Chone, 19 June--Epidemics of influenza and typhoid have been discovered in this town and neighboring settlements, affecting the entire population, particularly the children, and causing alarm.

In nearly every household there is someone with symptoms of a high fever and cough; but what has attracted attention is the fact that the disease has not declined even after 8 days of treatment using specific antibiotics. Therefore, it has been concluded that this is some new virus that is resistant to both antibiotic therapy and chemotherapy.

Several cases of typhoid fever have also been reported, one instance being that of an entire family coming from the rural area which is confined in this town's Civil Hospital. Hence it has become necessary for a preventive medical campaign to be instituted immediately, so that this disease will not spread.

2900

# CAMPAIGN WAGED AGAINST TYPHOID FEVER

# Water Causes Outbreak

Quito EL COMERCIO in Spanish 1 Jun 79 p 24

[Text] An epidemic of typhoid has broken out in the capital and in Guayaquil during the last few weeks, according to information reaching the news service of this daily.

Despite the fact that the health authorities have said nothing about this epidemic outbreak, it was learned that there are children and adults who have contracted the disease in all sectors of Quito.

A doctor said that in a period of barely 30 days he had treated about 15 cases. A laboratory technician, on the other hand, stated that he had diagnosed between six and seven cases a day.

According to the experts, it appears that the water drunk by the people of Quito, for which they pay high rates, is not treated very well and that this is specifically the cause of the disease.

In a related matter, they noted that at garbage disposal sites the required sanitary control is not being exercised and that this is another of the causes of the outbreak of typhoid in Quito.

# Typhoid in Guayaquil

Quito EL COMERCIO in Spanish 1 Jun 79 p 24

[Text] Guayaquil, 31 May--The provincial health chief, Dr Virgilio Macias Murillo, confirmed the detection of 12 cases of typhoid; however, he said that there is no epidemic in this port.

He said that the 12 cases had been confirmed out of a total of 24 persons who were taken to the Inpectology [Inpectologia] Hospital.

After insisting that there was no epidemic, Macias Murillo attributed the 12 cases to the ingestion of food prepared in the streets, because of

the fact that all of those persons work on a single shift,

He announced that the Provincial Health Center will initiate a permanent educational campaign to prevent as much as possible the consumption of meals which are sold on the public streets. He reported that he had ordered an evaluation of the amount of trash in the streets of the city so that the required measures could be taken jointly with the Department of Municipal Hygiene, namely the work of cleaning and fumigating.

# Cases in Pichincha

Quito EL COMERCIO in Spanish 5 Jun 79 p 22

[Excerpts] Up to 12 May this year, the Pichincha Health Center had reported 225 cases of typhoid fever in this province, a figure which represents an average of approximately one patient a day.

In this connection, the Ministry of Public Health and its respective organizations have taken the necessary steps to eradicate possible focuses of this disease which have been detected in the national area.

The Health Ministry is requesting the cooperation of health experts and authorities and of the people in general in the reporting of possible cases. In this regard, the director general of Health, Dr Jorge Reyes Salas, reported that with respect to the appearance of typhoid fever in Quito contact has been made with the Pichincha Health Center and strict regulations have been issued to cut this disease's chain of transmission.

# Mandatory Reports

It is worth noting that Article 66 of the Health Code is applicable, which reads as follows: "Doctors, laboratory technicians, veterinarians, directors of hospitals, schools, factories, workshops and institutions; chiefs of offices, of commercial establishments or of any other kind; owners of farms and, in general, any person who in the ordinary course of events or by accident learns of the existence of a contagious disease, categorized as one of mandatory notification or report, must inform the authorities of it within the 24 hours following the probable diagnosis."

# Penalties

Failure to comply with this provision of the Code is punishable as provided by Article 231 of the same code which states: "A fine of 50 to 500 sucres will be imposed for violations of the provisions of any of the articles," in this case, failure to report typhoid fever, as the covering up of this disease results in the contagion of many persons. Therefore, he emphasized that it is necessary for any professional, office chief, managers of industrial establishments, high school principals, etc to report to the

authorities of the respective Provincial Health Centers any proven or probable case of contagious disease.

# Cooperation

He stressed the fact that the Ministry of Public Health needs the cooperation of the people, as the existence of healthy carriers of the disease who are persons without apparent signs or symptoms of typhoid fever are disseminating germs. This happens with mobile vendors or handlers of food; therefore, care must be taken in the ingesting of such food, to cut the chain of transmission of contagious diseases.

The homes and contacts of the 225 cases of declared typhoid are being followed by the health authorities and sanitary inspectors who in the majority of the cases have succeeded in detecting the original focus of the infection.

# Assistance to the Campaign

The director general of Health, Dr Reyes Salas, made an appeal to the conscience of all Ecuadoreans to cooperate in this kind of health campaign which requires the contributions and assistance of all to permit eradication of any kind of contagious disease, in this instance typhoid, by the reporting of existing cases and taking care in the consumption of food and in hygiene in general.

# Outbreak Reported Confined to Guayas

# Guayaquil EL UNIVERSO in Spanish 12 Jun 79 p 13

[Excerpt] The governor of Guayas, Dr Jacinto Loaiza, reported that the health problem arising out of the outbreak of typhoid in Guayaquil is being contained by the competent authorities and organizations which make up the Guayas Health Center which has more than 100 doctors and which, therefore, does not feel it necessary to convene the Guayas Civil Defense Board, which he chairs by law. In this way the top official of the province responded to the action taken by the Director of the Educational Program, "The People and Health," Dr Walter Mori L., who made such a proposal publicly, as a means of determining the most appropriate measures to prevent an increase in cases of typhoid.

8143

### BRIEFS

EL ORO MALARIA OUTBREAK--Guayaquil, 8 June--A dangerous outbreak of malaria has been detected in Zaruma Canton, El Oro Province, according to information supplied by Dr Eduardo Romero Galarza, director of the health hospital center of the principal cantonal town of the region, and corroborated by laboratory technician Jorge Chang Hidalgo, who found more than 20 positive cases during testing which were officially confirmed by the Department of Malaria of the Provincial Health Office. [Text] [Quito EL COMERCIO in Spanish 9 Jun 79 p 16] 8143

RABIES IN MANABI -- Portoviejo (AEP) -- Sucre Canton reported to the Manabi Provincial Health Office that 36 cases of rables have been detected among adults and children. All of them had consumed milk from the same cow, it was learned officially. The chief of the health center, Dr Vicente Loor Cardenas, said that the epidemic outbreak had in fact been located in a sector of 24 de Mayo, Sucre Canton, having originated as the result of rabid dog having bitten a sucking calf as it was feeding. The cow was then milked, and the milk was given to human beings to drink. Consequently, in addition to the 36 persons, both the mother cow and the calf bitten by the dog, have rabies. The most infected are members of the Francisco Lucas family which lives in the "La Palanca" district. Lucas, on the one hand, went in search of medical assistance and health officials to inform them of what had happened and to attempt to save his family and, on the other hand, went in search of a Ministry of Agriculture official to request help in saving his remaining 14 cows. [Text] [Guayaquil EL UNIVERSO in Spanish 8 Jun 79 p 14] 8143

MENINGITIS DEATH IN QUITO—Health authorities are investigating the presence of a pathological meningitis syndrome which caused the death of Luis Alfredo Aguilar Ramirez, a collector at the Hipatia Cardenas Secondary School in this city. For some days he had been in poor health. On Friday he told his fellow workers at the school that he was suffering from severe headaches and was taken to the Andrade Marin Hospital, where he died in the afternoon. On Saturday the autopsy required by law was conducted at the Police Morgue, and the forensic experts permitted his family to have him prepared for burial. They took the body to a funeral chapel for the wake at the school where he was employed. The press was invited to a

posthumous service held by the teaching corps and student body and to the burial which was to have taken place at 1500 hours on Sunday. Suddenly, at 0900 hours, the health authorities arrived and demanded that the body be surrendered, as it was a question of a contagious disease. They said that the place had to be fumigated immediately and that suitable measures had to be taken. Investigation is being made to determine whether other similar cases have occurred. Luis Alfredo Aguilar Ramirez was 25 years old, unmarried, and lived with his mother and sisters. He had been studying administration at the Central University and was very well liked in various sectors. [Text] [Quito EL COMERCIO in Spanish 6 Jun 79 p 24]

MALARIA ALONG COLOMBIAN BORDER—An outbreak of malaria has become more serious in various areas of this canton, particularly in the border zone with Colombia. Consequently, the antimalarial directorate organized a campaign to eliminate the disease, including the general spraying of homes with DDT and the eradication of the larvae from their breeding grounds. The difficulties are increased by the rationing of electric power and the suspension of telephone service. Therefore, a commission of residents was appointed to travel to Quito to contact the civil authorities and to ensure the immediate solution of all these problems. [Text] [Quito EL COMERCIO in Spanish 14 Jun 79 p 16] 7129

# BRIEFS

ANTI-TYPHOID DRIVE--About 75 million school children will be immunized against typhoid in 1979-80. The Centre will allocate Rs 4 lakhs to States and Union Territories for anti-typhoid vaccine supplied by the Central Research Institute, Kasauli.--PTI. [Text] [Calcutta THE SUNDAY STATESMAN in English 24 Jun 79 p 7]

40 GASTRO-ENTERITIS DEATHS IN FATEHPUR--Fatehpur, June 24--At least 40 people have died in a gastro-enteritis epidemic which has spread to 300 villages in this district, says PTI, quoting reports reaching the district headquarter here. About 73% of the people in Eryan, Khajuha Asothar, Bahua, Bijapur and Deomi blocks are suffering from the disease. [Text] [Calcutta THE STATESMAN in English 25 Jun 79 p 1]

JAPAN

### BRIEFS

CHOLERA SEARCH ENDED—Chiba, 22 Jun (KYODO)—Chiba prefectural and municipal health authorities Friday terminated their search for the source of cholera contamination here. Since cholera germs were first detected in the Mama River flowing through this city on June 1, water samples were taken from 410 places and the germs were found at 36 sites. However, the three-week search for the contamination source proved futile and the prefectural and municipal anti-cholera headquarters decided Friday to terminate the search. They started disinfecting the river, canals and drainages Friday. [Text] [Tokyo KYODO in English no time given 22 Jun 79 OW]

PARTY JOURNAL CITES PROBLEMS WITH HEALTH CARE

Vientiane SIANG PASASON in Lao 12 Apr 79 pp 1,3

[Editorial: "Pay Attention to the People's Health"]

[Text] In conjunction with the organization to revive production, the task of public health, the supervision and protection of the people's health, is one of our most important tasks. it is instrumental in serving the people, transforming and building the economy, improving political foundations, and promoting and expanding excellent characteristics of the new system.

In the past the demands for this task were numerous, but we failed to give proper attention to the tasks of organizing, guiding, and supervising. For example, we have not yet given attention to and guidance in making the system of political support a specialized task for those cadres and workers who are carrying out this task. As a result, throughout 1979 the responsible central committee of public health must study policies, and detailed plans for expanding the public health network in the long term. Similarly, it must organize training to install basic concepts of socialist systems of public health and physical fitness in all cadres and workers who are working in this field. This is because they constitute a branch that is fundementally responsible for supervising and protecting the health of the people, especially multi-ethnic working people.

In order to insure effectiveness of the task of public health, supervision and protection of people's health, first of all, we must mobilize the masses and the armed forces to uniformly take part in the tasks of public health and physical fitness. We must take an interest in promoting these programs throughout production bases, especially within schools, military organizations, offices, factories, and agricultural cooperatives. This means that we must resolutely incorporate programs of physical fitness and health into the program to build a new life style: the people's eating and drinking habits must be hygienic, and they must maintain cleanliness in homes, city areas and villages. The radio network must devote a program to physical fitness each morning, thus encouraging listeners to exercise regularly while listening to the program. The public health department must maintain a disease-control program and must promptly eliminate a certain

number of dangerous diseases from the people, such as, malaria, leprosy, intestinal and lung diseases, etc.

The most important problem is in our efforts to raise higher the political qualities and specialties of the medical cadres. There must be a plan to train and upgrade public health and physical fitness cadres to the base level. Besides, we must improve the structure and content of instructions within specialty training schools, and must take an interest in politics, culture, and specialties in order to raise higher the quality of the instruction and to promptly meet needs. Furthermore, we must improve the process of receiving and distributing medicine in order that it reaches the hospitals, the population bases, and the patients; organize sales of medicine to the people through the trade sector, and encourage the discovery and preparation of traditional medicine through progressive and hygienic methods. All levels of administrative authorities must directly assist the specialized branches in developing and improving medical schools, hospitals, and in assigning their duties. They must increase political and administrative duties, as well as provide transportation vehicles, and other material foundations in order to enable these basic units to effectively serve the medical training and the treatment. The administrative committees at various minicipalities must support a plan to continuously educate victims of the old society, as well as a plan to correct various social evils. They must seek emloyment for those who previously worked illegally, as well as provide a longterm rehabilitation program for the incorrigibles.

The abovementioned are the content, direction and a detailed duty of the public health work and the work of supervising and protecting the health of the multi-ethnic population. The tasks require us to utilize the greatest efforts in order to achieve successful results and to give a new and progressive look to the public health work and to our people's living conditions throughout 1979.

# BRIEFS

LUANG P'ABANG CHOLERA VACCINATION--Vientiane (KPL)--Since March 18, the Luang Prabang Public Health Department has been sending a group of medical cadres out to give cholera vaccinations and medical treatment to the multi-ethnic population at various production bases in Siang Thong, Vikhoun, Vat That, Chomsi, Meunma and Mamo cantons. They have since succeeded in vaccinating over 1,500 persons. It was also reported that 3 days prior to the operation, the above department had dispatched another group of medical cadres to join the residents of Phonsai and Phonhin villages in uniformly providing public health care at residential homes and public meeting places. This was to promote the beginning of health work and disease control at the basic levels, by aiming at creating for the people a new and hygienic life style. At present, they continue to determinedly serve and care for the people at various production bases; they especially continue to follow up on the epidemic control before the arrival of the hot season. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 27 Mar 79 pp A3, 4] 9013

CHAMPASSAK MALARIA OUTBREAK--Vientiane (KPL) -- The period between January and March of this year saw the Champassak Public Health Department dispatch a group of medical cadres to the production bases in the districts of Phon Thong, Ba Chiang, Pak Song, Sana Somboun and Pathoumphon to join forces with the local medical cadres in order to provide health care and control malaria for the multi-ethnic population at rural, remote production bases. This was done in order to insure the health of the laboring people and to insure an increase in production. Four months have passed since the actual task, which resulted in their completion of examining for malaria in over 13,600 people, and distributing medicine against malaria to several hundred persons. Furthermore, the above cadres sprayed DDT in the homes of the people at nine cantons, 96 villages and in over 6,900 houses, exhausting 9,422 cc. of DDT. They also gave vaccinations against various diseases to over 4,800 children. At present, this mobile operation to check for diseases, distribute medicine and treat patients continues to be practiced at various localities within Champassak Province. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 31 Mar 79 p A3] 9013

ATTOPEU FLU EPIDEMIC --Vientiane (KPL)--During the period between March 8-13, all our comrages and the doctors at the Chareunsuk Canton Hospital, Samakkisai District of Attopeu Province expeditiously and timely controlled a flue epidemic which was spreading in various villages of the canton. Within such a short time they were able to diagnose diseases, vaccinate and distribute medicine to a total of over 500 recipients, and to save the lives of over 50 seriously ill patients. Moreover, they widely disseminated the techniques of the "three clean" hygiene movement to the people at the above canton. This was done to insure the health of the people and the farmers so that they might remain healthy and thus increase production. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 3 Apr 79 p A2] 9013

VIENTIANE LEPROSY WORK--Vientiane (KPL) -- Since last January the Public Health Department of Phon Hong District, Vientiane Province has performed its specialized task with determination and high spirits. During this period the department cadres diagnosed diseases, distributed medicine to 3,987 patients, treated 80 hospitalized patients, examined 305 pregnancies, gave physical examinations to 239 children, and provided tooth extractions and dental care to 40 patients. The district hospital is also specially equipped to provide treatment for certain diseases, such as leprosy. Alongside the use of the above conventional medicine for treatment, all the practitioners of traditional medicine are also active in discovering and preparing natural medicine from tree roots for use in the treatment of diseases and for supplying the needs of the patients. Since the beginning of the year these practitioners have been able to cure with their medicine over 70 patients, and 12 patients by acupuncture. At present, the above practitioners have prepared 550 kilograms of medicine from tree roots. Moreover, they have expanded a network of medical practitioners to cover several production bases, and to serve in the treatment and health care of the people. [Text] [Vientiane KHAOSAN PATHET LAO in Lao 11 Apr 79 p A1] 9013

SAVANNAKHET CHOLERA VACCINATION—Vientiane (KPL)—During the first 3 months of this year, the medical cadres in Khanthabouli District of Savannkhet Province were determinedly and industriously performing their specialized tasks. The following are their actual accomplishments: distribution of medicine to 12,830 recipients and 250 patients, health ispections, and assistance in childbirth for over 100 mothers, several trips to provide cholera vaccinations for a total of 12,230 residents at various production bases, dissemination of health guidelines against diseases at ten meetings which comprised a total of 8,960 attendees. In addition, they trained another 28 health combatants at various agricultural cooperatives. It was also reported that in March the administrative authorities, as well as the people at Thuat Canton, Champhon District of Savannakhet Province, held an opening ceremony for a new hospital at their criton. The hospital is equipped with 12 beds and a number of doctors to serve in it.

[Text] [Vientiane KHAOSAN PATHET LAD in Lao 13 Apr 79 p A2] 9013

VIENTIANE RABIES VACCINATIONS—Vientiane (KPL)—On April 18, the Animal Husbandry and Veterinary Department under the Ministry of Agriculture, Forestry and Irrigation dispatched a mobile team of over 8 specialized cadres to give vaccinations, in conjunction with the Vientiane Veterinary cadres, to various types of domestic animals in Hatsaifong District against diseases and animal plagues. During the operation they gave vaccinations against the epidemics of hoof and mouth disease, glanders, and rabies. Upon arrival at each base, they set up and divided the cadres into small groups to work courageously at every village in 11 cantons. The purpose of the operation was, in conjunction with the performance emulation, to welcome the approaching international Labor Day, May 1, and especially to complete the tasks of animal vaccinations against epidemics and to provide guidance on animal treatment before the arrival of the rainy season.

[Text] [Vientiane KHAOSAN PATHET LAO in Lao 20 Apr 79 p A3] 9013

# DENGUE, CHOLERA CASES REPORTED

# Dengue in West Malaysia

suala Lumpur NEW SUNDAY TIMES in English 6 May 79 p 7

[Text]

KUALA LUMPUR, Bet.

— There are 116 cases of dengue haemorrhagic fever reported throughout Peninsular Malaysia so far this year. This includes five deaths.

Anyone found hyparic.

For the same period last year, 97 cases in-cluding seven deaths were recorded.

The deputy Director of Health, Dr Jagjit Singh, said the worst affected State is Selangor which recorded 30 cases including one death.

Johore is next with 28 cases including one death and Perak with 23

Anyone found breeding aedes mosquitoes will be prosecuted under the Destruction of Disease-bearing Insects Act, 1978.—

He said a total of 1,8 warnings were issued in January and Pebruary and Tebruary and the Ministry would not issue any more warnings but would instead compound the offenders.

— Bernama.

# Cholera in Kucing

Kuala Belait BORNEO BULLETIN in English 2 Jun 79 p 1

[Text]

KUCHING. - The Medical Department has sent teams into a kampung on the Kuching-Serian Road following the death of a 70-year-old woman from cholera.

The woman, a Bidayuh, from Kampung Pe-laman Quop at Mile 134 died in Kuching General Hospital last week.

Her son-in-law is still being treated in the hos-pital and the Medical

Department has sent teams into the area around the kampung to vaccinate people against the disease.

Department officials advised anyone who has been in the kampung area within the last few weeks to go for treatment at the nearest climent nic or hospital.

Two months ago the department advised neople to eat only cooked food, drink boiled water and improve sanitary conditions with the start

of the dry season.

One case of cholera was reported in the state

last year. When the Bulletin went to press this week, medical officials in Kuching said there had not been any more reports of cholera from Kampung Pelaman Quop and they were now satisfied the situation was under control.

PERU

# BRIEFS

TYPHOID EPIDEMIC REPORTED—Lima, 26 Jun (EFE)—It was reported here today that at least 13 persons died and close to 100 have been affected by a typhoid epidemic which broke out in an extensive area of the Andes in northern Peru. The outbreak occurred in Santiago de Chuco Province, which is inhabited by almost 100,000 persons, who are faced with contagion. The disease is particularly ravaging in children. [Text] [Madrid EFE in Spanish 0249 GMT 27 Jun 79 PA]

# TANZANIA HOSTS MALARIA CONTROL SEMINAR

London WEST AFRICA in English 2 Jul 79 p 1175

[Text]

More than one million Africans. mainly children, die every year of Malaria, the most serious parasitic disease in the tropical world. Tanzania's Health Minister, Dr. Leader Stirling, said at the opening in Dar es Salaum, of a five-day international seminar on malaria control.

Dr. Stirling told the 100 delegates "experience has shown that eradication of mosquitoes, unless covering the entire globe, tends to be shortlived and the war to consolidate achievements in Africa has to be fought each year.

The experts at the seminar concluded that, although the disease was suppressed for several years, its resurgence, in Africa at least, is so serious that the region rather than individual states should work together to attack it.

In the 1950s it looked as if the wide-spread use of DDT was getting on top of the mosquitoes. But the conference heard yet more evidence that new generations of mosquitoes inherited resistance to it and new insecticides were the only answer.

Tanzania's Professor W. Kilama, a specialist in parasitology and entomology, said some species of West African mosquito can literally swim in insecticide without injury. He recommended a return to variations of the Roman method - environmental destruction of Mosquito breeding grounds by draining swamps and pools of standing water.

The first drug used to suppress the disease was Quinine extracted from the bark of South America's Cinchona tree. It has been used since the 17th century. Over the past 35 years drugs such as Chloroquine and Mepacrine have been widely used not only to cure malaria but in regular doses to protect against infection.

But there too the problem of immunity has raised its head. Evidence was produced at the seminar that in Kenya and Tanzania one type of malaria parasite. plusmodium falciparum, could have become resistant to chloroquine.

In Northern Nigeria and Upper Volta, delegates were told the same parasite appeared to show increused tolerance of chloroquine and was completely resistant to another anti-malaria pyrimethamine.

The experts concluded, however, that chloroquine was still the best drug to use as a treatment for and as protection against mularia and resistance to it was still only slight in Africa whereas it was already widespread in southeast Asia and Latin America.

The conclusions of the conference, which was organised by the Commonwealth Regional Health Secretariat, were that national mularia research laboratories should be set up, where they did not already exist and should co-operate fully with the with laboratories of the other states.

National immunological control programmes should be coordinated. Chloroquine should be administered in all suspected cases of malaria and as a protection in malaria regions.

Research into new drugs and especially new insecticides should be stepped up and ways of destroying masquito breeding grounds investigated.

Rural populations, particularly, should be motivated to take part in mosquito-control programmes and it was decided that, as in the case of leprosy, a central commonwealth body should be set up to monitor malaria.

# TAN NOTES PHYSICIAN SHORTAGE

Istanbul CUMHURIYET in Turkish 11 Jun 79 p 6

[Text] Minister of Health and Social Assistance Dr. Mete Tan, saying "Turkey has a need for 45 thousand doctors if it is to reach a figure of one doctor for every 700 persons," went on to add, "We shall arrive at out desired goal far more effectively by filling out the staff of the state organizations in the regions where the health services have been socialized rather than by increasing the per capita number of doctors."

In a statement made to CUMHURIYET Tan said that according to 1978 data 15 million persons had had treatment and examination in state hospitals and he affirmed that this figure would be higher as a result of using a more precise period.

### Doctors Abroad

Dr. Tan, in disclosing his views with regard to Turkish doctors outside of the country, said, "There are 1,100 of our doctors abroad. In view of the fact that our current shortage of doctors is about 20 thousand I am of the opinion that there would not be a great deal of benefit to bring these doctors back to Turkey. We know that these colleagues have adjusted to conditions in foreign countries. Work in the medical profession is a matter of team effort. When the doctors who are presently abroad return to their country they will encounter great difficulties because they will not find these teams."

9353

# RABIES CONTINUES TO BE PRESSING HEALTH PROBLEM

Istanbul CUMHURIYET DERGISI in Turkish 7 May 79 p 24

[Text] In 1804, hundreds of years after Claudius Galen, one of antiquity's physicians, conducted the first study of dog bites, Zinke discovered the role saliva plays in the transmission of rabies. In 1885, Pasteur produced a vaccine for rabies.

The vaccine that combats this disease that ends in a frightening death arrived in Istanbul in 1887, and Turkey's first rabies hospital was founded. While vaccines were given to 570 persons who faced the danger of rabies in 1900, the number increased each year and rose to 16,289 persons in 1978.

Today, deaths from rabies are no longer encountered in a number of European countries. According to a study conducted between 1972 and 1974, there were 53 deaths in Morocco, 29 in Yugoslavia, 6 in France, 5 in Poland, and 1 in Spain. During the corresponding 2 years, 209 persons died in Turkey.

In Istanbul today, there are approximately 150,000 stray dogs, and an average of 1,500 to 2,000 persons seek treatment at the Rabies Hospital each month. Whereas four persons died of rabies in 1978, there have been five deaths during the first 4 months of 1979.

Leaving aside the frightening figures that are the outgrowth of this frightening disease, let us listen to Ferhan Kut, the chief physician and only doctor of Turkey's first and only rabies hospital:

# Saliva Is Medium

"Rabies is a natural disease of all mammals, but particularly of wild animals of the forest. This disease does not occur in reptiles, fish, birds, or insects. The rabies virus is transmitted by means of the saliva at the site of a bite from a stricken animal. The disease cannot be passed on through the digestive system or through contact. Furthermore, the rabies virus quickly dies in a foreign environment and cannot live in the soil or on rocks on which the saliva of a stricken animal has dripped. It is definitely requisite that the virus enter through a wound, and all mammals are extremely susceptible to rabies. In addition, animals do not carry the

rabies microbe. In other words, a stricken dog will certainly die. There are, however, two exceptions to this. It is claimed that a species of vampire bat in Argentina and a genus of red fox in Germany's Black Forest are rabies carriers.

# Average of 40 Days

"Animals which have the rabies microbe die within 10 days. In humans, this period is related to the proximity of the wound to the brain, the depth of the wound, and whether or not clothing covered the wound. The average is 40 days. However, cases in which victims have died after 10 days and after 120 days have been encountered. The microbe, after entering a human's body, penetrates the brain by means of the nervous system and kills the victim by paralyzing the center of life that lies in the brain. There is no treatment for the disease. Only inoculation can save a person. The sooner during the virus' period of incubation that the vaccine is begun to be given, the sooner a positive result is achieved. If the life-saving vaccine is first given 15 days following transmission, 25 days remain in which to give the shots. If the first shot is given 2 days after exposure, 38 days are left. For this reason, it is necessary to start the shots as soon as possible. As demonstrated in the rabies film shown on television, there is no law that says a patient will die if there is a 48-hour delay. The goal is to give the vaccines over a long period of time.

"Rabies is transmitted to humans by dogs and cats -- by dogs in 80 percent of the cases. A stricken jackal in the forest bites a sheep dog. The sheep dog bites dogs in a village. These sick dogs later go to a town, and the disease grows to frightening dimensions."

If we look at the number of stray dogs in Istanbul, the number of persons who have come to get shots, and the five deaths in 4 months, it can be said that the disease has reached frightening proportions. Dr Kut has this to say about the war on this disease, which cannot be treated, but which can be prevented by inoculation:

"A war on rables means a war on stray animals. The physician and the veterinarian must work together in this war. So that the problem of stray dogs is not isolated from the health problem of the area, the municipality also must perform a function. Stray animals must be considered ownerless and must be destroyed."

"To destroy." It is here that a problem arises. How should the animals be destroyed? Dr Kut speaks of methods of killing with poison and bullets, of catching the animals alive and killing them in a gas chamber, and tranquilizing them with a dart gun and killing them later. He says, "The most civilized method and the one we prefer is to tranquilize the animals and kill them later, but, if this cannot be done, other methods must be used, because what is important to us is that the animals be destroyed."

# Consideration for Animals

However, the Istanbul Municipal Office, which began a campaign because of the widespread incidence of rabies in recent days, is killing 300 to 400 dogs a day using poison. According to information provided by Municipal Sanitation Services Director Sedat Koruklu, motorized crews consisting of a total of 60 persons who work between 1900 and 2400 hours throw poisoned meat to dogs and later bury them at garbage dumps. Koruklu, who reported that the dogs die within 3 minutes of ingesting the poison, said that the dart guns were tried, but the animals were not tranquilized. An interesting aspect of the poisoning method is that, while a kilogram of meat costs 150 liras today, the municipal budget allows only 250 liras per month for meat. As for the poison that is used, foreign purchases are necessary, and the poison costs 30,000 liras per kilogram.

While rabies flourishes, there are still some defenders of stray dogs. The Animal Assistance Association, called HAY-DER for short, released an "urgent, vital" communique dated 14 April 1979:

"This is the occasion of our second national congress. It is sufficient that you do not hesitate, but come. Come even if you are in mourning. Come to gain the approval of Allah and the Prophet. The murderers and executioners who torture all of our animals will henceforth pay the same price. Definitely come if you wish to see the war we are waging against the municipal executioners, who even go into dens and, without compassion, lasso and choke to death the mothers using the false pretext of rabies and kill the newborn young as well. These are the animals that suffer from thirst and hunger on our streets and roads and that are cruelly crushed under tires of vehicles. In the meantime, do not forget that this auspicious holy war will succeed with financial support."

# One-Han Army

Leaving aside those who launch a "holy war" so that stray dogs will not be killed and returning to Istanbul Rabies Hospital, we can see how shots are given to the 4 and 5-year-old children that have been bitten by these dogs.

We spoke with Dr Kut, the only doctor at Turkey's first and only rabies hospital. Dr Kut examines hundreds of patients each day, buys the coal for the hospital, schedules employees' vacations, and, at the same time, prepares rabies inoculations in rabbits' brains. Istanbul Rabies Hospital operates 24 hours a day without closing. Rabies serum is produced at Refik Saydam Institute in Ankara as well as at the rabies hospital and is distributed in Anatolia. The cost per shot is 5 liras whereas the rabies vaccine for animals costs 400 liras.

11673 GSO: 5400

# NEW HEALTH UNDERSECRETARY ANNOUNCES MINISTRY REORGANIZATION

Montevideo EL PAIS in Spanish 27 May 79 p 17

[Unsigned article: "Public Health Ministry Faces Thorough Reorganization"]

[Excerpts] The Ministry of Public Health (MSP) is facing a thorough internal reorganization intended to emphasize the coordination and efficiency of its technical and administrative services within a time limit that is difficult to estimate.

This primary objective will be accomplished by rationalizing the allocation of financial resources and redistributing the personnel, which will not be increased or reduced.

The announcements were made to EL PAIS last Friday by auditor Luis Nicoletti Torchelo, who on that day assumed the undersecretaryship of the public health portfolio, with which he has been associated for the past 6 years as a technical official.

The Asuncion Act

It was stressed on the occasion that Dr Nin Vivo requested to be released from his post to devote himself to his specialty (thoracic surgery), and he was replaced by auditor Nicoletti, who was in charge of the Administrative Division of the MSP.

Minister Canellas referred to his speech to the fact that a new war is opening up in the portfolio with the designation to the undersecretaryship of a specialist in administrative and accounting matters, at a time when the ministry is developing within its sphere a process of internal rationalization intended to improve its management.

Dr Nin Vivo, who is leaving within the next few days for the United States to engage in studies of his specialty, expressed his gratitude for the trust placed in him during his tenure and said that he will continue to cooperate closely with Minister Canellas on technical matters related to his specialty.

# Primary Objective

Auditor Nicoletti talked to EL PAIS at the end of the ceremony about the critical situations that prompted the chief interest in his future task. He said on that score "that the internal reorganization of the ministry" constitutes the primary objective.

He warned that "the problems of the portfolio are many" and that he would "focus his attention on coordinating and adjusting the public health organizational structure" on the basis of a law dating back to 1974.

Nicoletti, aged 40, declined to furnish more information regarding the reorganization, pointing out that "it is a complicated matter and is going to make it possible to emphasize coordination between the technical and administrative levels within a time limit that is difficult to estimate."

8414

# MEASLES VACCINATION UNDERWAY, FLU, HEPATITIS NORMAL

Montevideo EL PAIS in Spanish 29 May 79 p 5

[Text] The Ministry of Public Health has been rapidly carrying out the vaccination campaign initiated this month against rubella. The first phase of the schedule set up by the authorities is about to end, and implementation of the second phase will get underway within the next few days.

The ministry planned the campaign in three phases: The first consisted in the vaccination of children from 1 to 3 years of age; the second is of a very special nature because it seeks to immunize the largest possible number of children from 1 to 12 years of age within the shortest possible time; and the third is intended for children in the rural areas.

The first phase was started at the beginning of this month with the distribution of the dual vaccine against measles and rubella to all approved public and private vaccination centers. Sources at the Ministry of Public Health said that it is being administered at a satisfactory pace and that they are ready to begin the second phase.

The ministry's schedule proposes to vaccinate children of both sexes from 1 to 12 years of age, and to revaccinate only the girls when they get to be 13 years of age.

The reason for the revaccination of girls is that it has been discovered that rubella produces disorders and changes in an unborn child when the mother is afflicted with the disease. These changes frequently result in increased numbers of miscarriages and still births, low weight at birth and other malformations, with a pronounced rise in the rate of infant mortality.

The source of infection will be eliminated by vaccinating the population of both sexes from 1 to 12 years of age, and it is sought to protect women during the fertile period of their lives by revaccinating girls at 13 years of age.

Flu: It Is an Enterovirus

The director of the Epidemiology Department of the Ministry of Public Health, Dr Perez Moreira, pointed out yesterday that the number of flu cases being registered in Montevideo does not warrant terming the situation an epidemic. He noted that it is not actually a flu virus, but an enterovirus that produces symptoms similar to that of flu, though much more benign.

Dr Perez Moreira added that the number of cases registered is normal for the time of the year, although it is a disease that should be constantly watched inasmuch as it can suddenly turn into an epidemic because its symptoms are difficult to combat.

He said also that research is being continually conducted on a worldwide basis to identify a type of virus that is common to all flu conditions, in order to obtain a really effective vaccine.

Hepatitis: No Epidemic Either

As to the cases of hepatitis registered in the past few days and which have alarmed certain sectors of the population, Dr Perez Horeira indicated that they cannot be termed an epidemic either because their number is normal for the country.

He said that the increase in the number of cases that the population has become aware of does not mean that they have really gone up, but that there has been an increase in doctors' reporting of treated cases to the ministry. Physicians, particularly those of the interior, have become aware of the need to inform the national health authorities about the registered cases in order to maintain complete control over the situation and actaully prevent an epidemic from occurring.

**VENEZUELA** 

#### BRIEFS

YELLOW FEVER VACCINATION CAMPAIGN—Massive vaccination against yellow fever was ordered by the health authorities in the capital, Colon District, as well as in San Carlos and Santa Barbara del Zulia. The vaccination was being given yesterday in public places and at the schools. In the Colon sanitary district, which operates in the Colon General Hospital, we were informed that the massive vaccination order was given by SAS (Health and Social Welfare) but no further important information was forthcoming concerning the causes which had led up to it. The director of the general hospital, Dr Diego Gutierrez Badell, in reply to a question as to whether yellow fever had been located in the frontier region, denied this, adding that last year, given the presence of various cases in the area, there was an order given for vaccination of the frontier population. [Text] [Caracas EL NACIONAL in Spanish 14 Jun 79 p D-27] 7129

EFFORTS TO CONTROL TSETSE MENACE DESCRIBED

Lusaka SUNDAY TIMES OF ZAMBIA in English 24 Jun 79 p 3

[Article by Arthur Simuchoba]

[Text]

THE testse fly is not as common as the house fly. It occurs only in certain areas. But wherever it is found, it is a matter of concern.

The fly carries a disease which affects both man and livestock. In man, the disease is known as sleeping sickness and in animals, trypanosomiasis.

If untreated, the disease is fatal in both.

For this reason, tsetse-infe s t e d areas are not pleasant places to live in. There is always the danger of infection and the rearing of livestock

is virtually impos-

Such areas are, therefore, largely uninhabited and generally undeveloped. But they have potential.

This potential is greater in Africa where a considerable chunk of the continent is tsetseinfested.

It is estimated that ten million square kilometres on the continent are infested. The area is equivalent to twice the size of Europe or 12 times the size of Zambia.

The exact potential of the tsetse-occupied area is not easy to determine conclusively.

But it is known that 70 per cent or seven million square kilometres are suitable for livestock development and arable agriculture.

As many as 140 million head of cattle can be raised in this

area. At present, the 35 African countries in the tsetse belt, Zambia among them, have a total of only 20 million head of cattle.

That 120 million more could be raised is seen to underscore the need for effective tsetse control and eradication programmes.

Affected African countries, themselves already fighting the fly and generally short of beef, and such agencies dealing with food production as the United Nations Food and Agriculture Organisation [FAO] are keen on eradicating the fly and use the land.

Quite apart from purely agricultural considerations, there are other reasons for wanting the land. Expanding populations is one.

There is also the question of protein deficiency due to lack of meat and milk among those few people living in tsetse-infested areas.

But with the danger of human sleeping sickness receding, it is primarily the agricultural potential of the occupied land that is bringing the tsetse fly more and more into focus.

At the world food conference held in Rome in 1974, the problem of animal trypanosomiasis was discussed.

For among the resolutions passed by this august gathering was one which called on the FAO to "launch, as a matter of urgency, a long-term programme for the control of African animal trynanosomiasis, as a project of high priority".

The fly that must be eradicated to control the disease normally lives a maximum of three months only. The name tsetse is a Tswana word and is said to mean "a fly that destroys cattle."

There are 22 species in Africa. All can transmit the disease but only a few are of economic importance. Both sexes live on blood and are said to feed almost daily.

A healthy female will produce a "baby!" every ten days. One peculiarity is that the tsetse fly does not lay eggs like other flies.

Instead, it would seem that the eggs are laid inside the body. The "baby" leaves the "mother's womb" in the form of larva, the stage after the egg in most insects' life cycle.

The larva, which is deposited in a shady place, burrows into the ground and develops into an adult several weeks later.

Tsetse flies are not born with the disease. But they live on blood and mainly that of wild animals.

It is this parasite which is transmitted to the fly during feeding and is in turn passed on the man or other animals again during subsequent feeding which causes the disease.

The disease, sleeping sickness, is a serious one and has been known since the last century.

There are two kinds, but one is more serious. It is invariably fatal if untreated, causing death within four to six months of infection. The other, is chronic and not as virulent and is found mainly in West Africa, not at all in Zambia.

# Infected

Irregular fever, delayed sensation and lethargy are the common symptoms of the disease. Ultimately, the brain becomes infected and at this stage it kills.

in animals, particularly cattle, the severity of the disease, according to reliable sources, is very variable.

Usually, death occurs after a period of one to three months. The complication which arises due to infection is that the animal's capacity to produce red blood cells is hampered.

The FAO, as a result of the resolution of the world food conference, has started a programme to control the disease. It is just getting

off the ground.

The first conference on the programme, termed a "consultation," was held in Accra, Ghana. The second such consultation was held in Lusaka last December.

That the consultation was held in Lusaka is a measure of Zambia's interest in the programme.

Zambia is interested because it has a tsetse problem. Though many are unaware, the fly is very Zambian.

The first case of one of the two kinds of sleeping sickness was discovered in the Luangwa Valley in Eastern Province in 1908. This kind is known as Rhodesiense and it is the one which kills within six months of infection.

#### **Derives**

It is the only kind of sleeping sickness found in the country and it derives its name from Northern Rhodesia as Zambia was known before independence.

Experts say that one third

of Zambia, 250,000 square kilometres, is tsetse country.

Out of the 22 known tsetse species, only four are found in this country. Only one of these is the major carrier.

The main tsetse belt covers four provinces; Western, Southern, Central and Eastern. There are, of course, pockets of flies in the other provinces, especially since all national parks and game management areas are infested.

Sleeping sickness is not considered to be a big problem in Zambia. It is, according to reliable sources, a disease involving very small numbers in very sparsely populated areas and is limited to three areas, the Luangwa Valley, south-east of Lake Bangweulu and the Kasempa district of North-Western Province.

In the eight years, 1970-77, there were 1,012 cases of aleeping sickness and 159 deaths. The highest number of cases was in 1972 which recorded 394.

Sixty-three people died in 1974 and that was the highest number of deaths in the period.

There is currently an outbreak in the Luangwa district. About 200 people have so far been affected by the disease which was first detected last January.

Plans are now afoot to start a vigorous immunisation campaign in the district.

Observers are, however, perturbed at the slowness with which the authorities are dealing with the matter. One reason for the outbreak is that the department of veterinary and tsetse control services had suspended its operations due to the security situation there.

But if the danger to man is rather minimal, it is more serious with livestock.

It is estimated that 60 per cent of the national herd estimated at two million is exposed to the tsetse threat.

Trypanosomiasis, the experts say, is one of the most serious animal diseases in the country.

## Eraure

In 1977, 472 cases were diagnosed. Reliable sources have it that this represents only a small portion of the total number of infected animals.

Diagnosis is not easy, the organism is not always visible even under the microscope. To ensure adequate coverage, blanket treatment is given to all cattle in the area where the disease has been diagnosed.

In the same year 464,690 doses of curative and preventive drugs were adminis-

tered.

From this figure, reliable sources say, it can be concluded that about 300,000 cattle are treated for the disease annually. This is about one fifth of the total cattle population in Zambia.

The disease is not very prevalent in the north of Zambia, which accounts for only ten per cent of the

national herd.

In this area, therefore, the disease is not considered an impediment to livestock development though human sleeping sickness is prevalent.

The picture changes in the southern half. This part, Southern, Western, Eastern and Central provinces, accounts for 90 per cent of the national herd.

With a few exceptions, the fly is a major constraint to livestock development and arable agriculture in this

area' .

The tsetse fly in Zambia, as in other parts of Africa, is therefore primarily an impediment to livestock development and arable agriculture. There are efforts to remove it.

### Increased

The Zambian mood was best reflected in the opening speech of Agriculture and Water Development Minister, Mr Alexander Chikwanda, when he opened the second consultation of the un-sponsored programme on animal trypanosomiasis last December.

Among other things, he said, "active tsetse elimination programmes are desirable to provide more land for human habitation and to facilitate increased economic activities aimed at talsing the standard of living of the people, especially in rural areas."

It is not Zambia's policy to completely eradicate the fly. The policy is that tsetse control should be regarded as an element in the overall development plan for an

area

There is, in any case, general agreement among experts that total eradication is not possible. Efforts are concentrated in areas where there are plans to utilise the land, after flies have been eradicated.

## Maintain

Until 1975, the objective of the department of veterinary and tsetse control services, the main control agency in the country, was to maintain the status quo by restricting the fly to identified fly belts.

It was a policy of defence along a front of over 1,000 kilometres in Western, Southern, Central and Eastern provinces. This policy was reviewed and changed in 1975.

The new approach is extreminative. Where there is economic justification, the policy is to push the fly back and eradicate it where possible. The objective is to release new land for expansion and development.

Three methods are used.
The holding line, also known as the game fence, is used to prevent encount has by the fly into populated areas.
Such fences are usually

Such fences are usually erected on the edges of fly belts to prevent the free movement of wild animals into settled areas thereby spreading the fly.

Animals which cross the line into populated areas are

killed.

The longest such fence is 500 kilometres. It stretches from Mulobezi, through Kalomo and Namwala in

Southern Province up, to Mumbwa in Central Province.

There is at least one fence in all the four affected provinces. In all, there is 1,127 kilometres of such fencing in the country.

Where encroachment has taken place, control operations proceed through spraying and bush clearing in the affected areas.

# Depends

Spraying is also used to eradicate the fly from an area as in Mumbwa district.

There are two kinds of spraying — aerial and ground. The choice of which one to use depends on a number of factors such as the size of the area to be sprayed.

In the Second National Development Plan, the objective was to eradicate the fly where it had encroached beyond the holding lines into

settled areas.

Accordingly, 3,400 square kilometres were aprayed in Western Province during 1975. This province is not a serious case, but there was encroachment from Senanga south.

A danger did exist that this would spread to cattle areas. The spraying pushed the flies back to the holding line around the Sioma-Ngwezi national park. The area is now free of the flies.

In Central Province, the fly front is long but reportedly stable. About 1,062 square kilometres were ground-sprayed in Mumbwa.

This operation was an attempt to assist the move of Chief Kabulwebulwe into a new area of virgin bush west of the boma.

An isolated fly-infested area, 400 square kilometres, at Kabile-Kapyanga in the same district, was cleared of fly in 1974.

# Sprayed

The country's largest tsetse problem is Southern Province. In this province, 3,000 square kilometres were serially sprayed in 1971,



learing the area between Chitongo and Sikaleta, near Namwala

In the Macha area, Choma district, \$00 square kilometres were cleared of fiv in 1974

There is currently an operation to push the fly back westwards from Chief Chika hta's area to Kalomo

In 1978, 2,000 square kilometres were aerially sprayed in the area. In chief Nyawa's area in the same district, 200 square—kilometres—were ili ared using hand operated sprayers The greater part of East ern Province is exposed to tsetse infestation from the Luangwa Valley. The length of the holding line is 312 kilometres.

A total of 7,670 square kilometres has been cleared by aerial spraying and 2,191 square kilometres by ground spraying in Chipangali, Kalichero, Kasenengwa, Katete and Petauke districts since 1971

These operations were of varying success. The Chipcall area has become largely re-intested. Techniques of aerial spraying have improved and in the most recent spraying of Petauke, 2,600 square kilometres in 1977 was completely successful.

In the remaining provinces, the fly problem is on a small scale since there are tew cattle. Plans have, none-theless, been put forward to eradicate the fly where it is considered an obstacle to development

# Hampered

This campaign has, of course, had its share of pro-

hiems — lack of funds particularly recurrent funds, from which such expenses as salaries are paid out.

Transport problems as well as lack of spare parts for spraying equipment, greatly hampered the efficiency and activities of the department.

The result, according to reliable sources, was and continues to be, under-utilisation of manpower as urgent surveys have to be postpon-

Careful assessment of the effectiveness of the control methods is likewise greatly hampered.

hampered.
With the Luangwa outbreak, there is clearly need
to look into these problems.

It is proposed during the Third National Development Plan to eradicate the fly from 30,000 square kilometres in the country.

# Considered

It is envisaged also that there will be greater utilisation, of hand-operated sprayers. This method is considered the most selective and economical way of spraying as well as being labour intensive.

There are plans to expand operations into the major fly belts and to place less reliance on the holding line which is proving expensive to maintain.

During the plan period, it is hoped that the new policy of attacking the fly will be implemented.

The un-sponsored programme, a conference which met in Lusaka last December is the larger one for the eradication of trypanosomiasis on the continent.

The programme is still in its preparatory stage. Twenty-eight African countries are covered, Zambia among them, and in fact, the FAO regional offices for the programme is in Lusaka.

It is regional in character since files know no national boundaries. When it gets off the ground, therefore, it will have to employ several control techniques simultaneously to suit local conditions. The programme lies great emphasts on property planned settlement and development of reclaimed areas to discourage re-infestation by flies.

This is an important aspect of tsetse control. Without proper development of cleared land, flies can return.

It is now in fact generally agreed that the lasting solution to the problem is proper settlement of cleared land to deny the tsetse fly its habitat. This is recognised in Zambia.

# Expressed

The cost of the programme still has to be ascertained. What is known is that the major international, multilateral and bilateral agencies have informally expressed interest to support the drive.

That a comprehensive international programme to control animal trypanosomiasis has been found necessary is a clear sign that the tsetse fly is still very much a menace.

#### PUBLIC CALLED TO AID IN WAR ON RATS

# Manama GULF MIRROR in English 22 Jun 79 p 2

[Text]

BAHRAIN has declared war on rats. The public is being asked to call in a health inspector at the first sign, and a televison campaign mounted to increase public awareness.

"We're trying to bring home to people the importance of cleanliness in residential areas," said Bahrain environmental health officer Mr Ali Anjawi. He cited areas with bad drainage and uncollected garbage as potential trouble spots. Old deserted buildings should also be checked.

"We want the public to help us in ridding Bahrain of rats," said Mr Anjawi. "Until last year, we could attack the problem only on a part-time basis. Now we have a special section at the directorate of public health, with a supervisor, three inspectors and eight labourers."

A campaign was launched this week on Bahrain television, emphasising the dangers posed by rats.

"The situation is improving. "In May we collected only 35 dead rats after laying down poison bait in ports and customs warehouses, in March there were 60."

The old commercial area of Manama was the rodent control section's target last month, and after laying down a highly toxic poison in shops and storerooms, out of reach of children and pets, 198 dead rats were collected.

# AFRICAN SWINE FEVER ENDEMIC ONE YEAR LATER; IMPACT ON EXPORTS

Rio de Janeiro O GLOBO in Portuguese 18 Jun 79 p 3

[Text] One year after the outbreak of the first focus, on a Pirai farm, African swine fever is still occurring in the state and in the country, if only endemically. The virus is still around in chronic form, but it is not killing off hogs in the numbers recorded last year.

The information comes from Raimundo Diogo Machado, chief of the virology department of the Institute of Microbiology, Federal University of Rio de Janeiro, following an analysis of 9,000 hog specimens throughout the country over this year.

Machado said it is very difficult to isolate the African swine fever virus completely, and he reported that the serological tests recently conducted in the pork-producing area were positive. He is not sure if the disease first appeared at the time of the Agriculture Ministry campaign last June or had already existed.

"We will make a complete survey throughout the country to ascertain whether African swine fever entered Brazil before June 1978. At this time the disease is in an endemic curve. Most of the tests conducted on matter collected from the foci were positive, confirming the presence of African swine fever in Brazil."

Machado also feels that isolation of the swine fever virus presents a very low figure, because of its present chronic phase.

"However, most of the positive results were in the serological tests, which indicates the disease is chronic. The Agriculture Ministry has taken certain steps to close the borders of some states in the southern region. There were more positive tests with matter sent from Parana, Santa Catarina, Sao Paulo and Rio Grande do Sul," Machado said.

The first swine fever focus in Brazil appeared at the Floresta Farm in Pirai, owned by Severino Pereira Filho. Some 18 of Severino's hogs were sacrificed last month after technicians of the Rural Federal University of Rio de Janeiro

confirmed that the animals were diseased. The Agriculture Ministry did not divulge the fact; O GLOBO learned it through Severino's friends and farm employees.

The government slaughtered 66,908 infected hogs last year, with indemnizations totaling 45 million cruzeiros. There is no vaccine for African swine fever; even the crystal violet vaccine used to combat classic swine fever—the so-called "batedeira"—has not been manufactured in the state of Rio de Janeiro for 6 months. According to the hog breeders, the lack of vaccine, which is only available in Santa Catarina, Sao Paulo, Parana and Rio Grande de Sul, is jeopardizing Rio's swine herd.

In municipios in the south of the state, breeders whose hogs were slaughtered by the government last year are bringing suit to collect the indemnification promised by the Agriculture Ministry. At the time of the swine fever outbreak in Brazil, the ministry announced it would pay 20 cruzeiros per kilogram for pork, but it has only paid 13.80 cruzeiros.

Physician Otavio Marques Lisboa owns the Sao Roberto Farm, located on the Estrada do Sanitorio in the focal area established by Agriculture Ministry technicians as falling within a 16 kilometer radius of the Floresta property, Lisboa still does not believe that African swine fever occurred in Brazil last year.

He has always used the latest techniques for breeding and overseeing his swine herd, which numbered 650 hogs in June 1978. Otavio's hog pens are currently empty, his hands have scattered to other sectors and only now has he gotten the nerve to begin to restock his pens. (He expects to use some of the 10 million cruzeiros in credit that the Rio Development Bank will distribute among the hog breeders of southern Rio.

"Worst of all," Otavio said, "the government acted in bad faith. It promised to pay 20 cruzeiros per kilogram and it only paid 13.80 cruzeiros. There was dishonesty. Because of swine fever, many people could not meet their debts and ended up with title claims against them in the registry offices. We went to complain and were told that they were following orders from Brasilia."

Otavio lost 120 breeding animals—Langewith, Duroc, and Landrace. Joao Marcos, owner of the Sao Marcos Farm, lost his entire swine herd—about 600 head. They were bludgeoned to death. As a result of the swine fever that led the government to sacrifice his animals, Marcos, who is well-known throughout southern Rio, even experienced the humiliation of having title claims filed against him in the Pirai registry.

Severino's property, an area covering 7 "alqueires" [or nearly 17 hectares], was closed off by the Military Police, SNI [National Intelligence Service] and Federal Police agents. At the end of last month, Severino smiled sarcastically when he heard what the Agriculture ministry proposed to pay in indemnification for the slaughter of his 1,400 hogs: 750,000 cruzeiros.

Severino was not interviewed because he is in Rio Grande do Sul, but his friends told 0 GLOBO that he was disgusted with the proposal, since by his reckoning he was entitled to over 5 million cruzeiros. At the end of last month [as published], the government offered Severino 2.5 million cruzeiros, but he has not received the money yet.

#### Location of the Focus

The Floresta Farm is located at Km 57 on the right side of the Dutra Highway, heading from Rio to Sao Paulo. It employed about 30 hands before it was taken over by the Military Police, who would not grant anyone access to its installations. Today anyone may travel freely over the Floresta Farm's 7 "alqueires."

Otavio Silva is employed by Severino to feed the hogs, clean the pens and oversee the animals' health. He related that last month veterinarians from the Itaquai Rural University examined Severino's hogs and decided that 18 of the 400 head were infected with African swine fever. The animals were incinerated at Itaquai.

"The men came here, took blood samples from the hogs and concluded that some of them were sick," Otavio said.

The Floresta farm employee added that although the companies that cater meals for airline passengers continue to offer scraps for his employer's hogs, Severino has never brought in scraps that might carry swine fever virus. The hogs are fed on rations, mainly purina.

#### Protests

All the municipal and state slaughterhouses in southern Rio are still shut down. The only ones operating are government-inspected or clandestine. Pork is now being sold with no great problems in the street markets and supermarkets throughout greater Rio de Janeiro, but hogs may be butchered only in the slaughterhouses of Santa Cruz, Tres Rios, Resende and Campos. The slaughterhouses of Carmela de Mato, Acougue Vitoria and VAP, the last located in Valenca, are still interdicted. A. Martuschello, which produces Belprato products, is not slaughtering animals either.

Councilman Ivan Torres (ARENA [National Renewal Alliance]), president of the Municiapl Chamber of Pirai, said: "The government has an obligation to provide an explanation to the public for the African swine fever phenomenon." According to Torres, the government measures—closing the Dutra Highwa; to the transport of animals and animal products, and the indiscriminate slaughter of all the hogs in the region—have caused his municipio "incalculable" damage.

"We are still apalled at what the Agriculture Ministry has done to the hog breeders in this region. No one is really sure this was in fact African swine fever. You don't hear any more comment about it today. The question everyone is still asking is: Was there really swine fever in Brazil, or did this all have to do with the secret economic interests of some sectors?

Natanael Soares da Rocha, who owns the Penedo Ranch in Resende, doubts that African swine fever ever really existed in Brazil.

"I was in the area of the focus in Pirai, and nothing happened to my herd. The government has not indemnified any one to date. I know that anyone who paid the guards on the Dutra Highway could freely pass through with any animal from the area of the focus. The government made a big to-do. The technicians with whom I discussed the problem last year even said that the swine fever involved Rockefeller interests. The government took off in a leaky boat," said Natanael.

#### EMATER

Veterinarian Luis Sergio Rangel Messias is responsible for the technical assistance offered by EMATER (Rio de Janeiro Rural Extension and Technical Assistance Enterprise) to hog breeders in the south of the state. Messias believes that the government measures to eradicate swine fever have had negative economic repercussions on the municipios of southern Rio--Resende, Barra do Pirai, Vassouras--but he also feels that "any one of us would have done the same thing, because this is an exotic disease."

Messias does not believe that the first focus of the virulent disease was on the Floresta Farm in Pirai, as announced by technicians of the National Secretariat for Livestock Protection.

"From the way the disease spread, the outbreak did not originate in that region. During a conference on African swine fever, which took place in Curitiba at the end of last year, some highly regarded technicians concluded that the disease had already been in Brazil for some years," he said.

## Not Serious

In the opinion of Jose Resende Peres, former secretary of agriculture, the African swine fever was localized last year in Pirai, in the state of Rio and soon spread to several locations in the country, and it was not all that serious.

According to Peres, the disease foci were identified throughout the state of Rio. He said that African swine fever "is apparently eradicated." In his view, the measures taken by the Agriculture Ministry were correct, because Brazil does not have the "knowhow" to combat the disease.

"I don't believe that African swine fever was brought in by the multinationals, as some people insinuated at the time action was being taken against the disease foci. The swift action of the government technicians was very important for the preservation of our swine herd. From what I have been told, the last focus was identified on Ilha de Marajo," the former agriculture secretary said.

# Hasty

Irval Leonel Veira, president of the Rural Association of Southern Rio de Janeiro, believes the Agriculture Ministry acted too hastily against African swine fever. According to him, the fever is there, but in a mild form, not as violent as the fever that did in the Cuban herd, for example.

"The problems created by the government's drastic measures were serious, threatening the economy of some of Rio's municipios. Our association has been informed that the government has not paid the hog farmers the price agreed on at the time," he said.

# Pork Exports Ended

Brasilia (O GLOBO) -- Brazilian pork exports, which reached 8,000 tons in 1977, have dropped to zero since the first focus of African swine fever was detected in the state of Rio de Janeiro, 1 year ago.

The information comes from Silvino Carlos Horn, secretary of livestock health and defense, Ministry of Agriculture. "Large investments had been made in hog production and the soybean industry, in order to win a significant portion of the international market, and the swine fever was very damaging."

According to the secretary of livestock health defense: "Whenever PSA (African swine fever) has appeared," the WHO, the International Epizootic Office (French) and other international agencies that provide technical assistance in the field of animal health "have not issued statements that might have warned member countries about the possible transmission of the virus through other animals or agricultral products, particularly soybeans."

Horn observed: "With respect to commercial restrictions on the exportation of soybeans and soy products, above and beyond the resolutions that have already come out of international meetings, some countries have set very strict requirements, which specialists in African swine fever feel are impossible to meet.

"For this reason," the secretary said, "the case merits diplomatic action, because, scientifically, the requirements have had little reference to the problem, suggesting that their purpose is to debase prices." In this respect, he cites the example of Portugal, a traditional importer of brazilian pork. "Although it showed an interest in resuming imports, which were interrupted in 1978, it has not done so because of pressure from the EEC."

#### Cost

Last year the ministry of Agriculture spent 181 million cruzeiros to combat African swine fever, as well as paying 45 million cruzeiros in indemnizations for the slaughter of 66,908 hogs. This year, although the situation is already under control, the Agriculture Ministry will spend 50 million cruzeiros on swine fever control programs.

According to Ministry of Agriculture technicians, PSA contamination in the domestic swine herd resulted from feeding the animals scraps from planes coming in from the Iberian peninsula and African countries, which are known to be contaminated. They also feel it is "highly probable" that the clandestine African ships that carried pork and landed along the northern coast of Brazil last year transmitted PSA to the herds on Ilha Marajo, in the state of Para and in the territory of Amapa.

In June 1978, when the presence of the disease was confirmed, "Brazil still did not have a serological laboratory for diagnosis; it was conducted in the American Plum Island laboratory," said Horn. A serology laboratory was later created at the Federal University of Rio de Janeiro. At present, the Agriculture Ministry, in conjunction with the Secretariats of Agriculture, is installing serology laboratories in the states where the major swine herds are located.

According to the secretary of livestock health defense, 15 or 20 years ago the mortality rate from PSA was high, killing up to 80 percent of the diseased hogs. As a result of biological alterations in the virus, the infection is not as severe or as lethal now, although there is still no vaccine for the disease.

On 1 December 1978, the FAO sponsored a meeting in Mexico, attended by 17 scientists from the United States, Mexico, Brazil, Poland and technical agencies. "At the meeting," Horn said, "it was concluded that, except for fresh port and pork by-products (because it has been impossible to prove scientifically that processing guarantees total deactivation of the virus), the countries that are free of PSA may allow basic agricultural products to enter from contaminated countries.

"On the basis of these conclusions, reached by an international agency, Brazil is engaged in gradually winning back international markets, notifying the foreign missions of the health measures that have been adopted. At the same time," Horn said, "the country is attempting to convince interested countries that Brazilian pork and pork by-products are safe and clean."

#### VIRAL DISEASE CAUSES STILLBIRTHS AMONG FINNISH HORSES

# First Appearance Since Wartime

Helsinki UUSI SUOMI in Finnish 12 May 79 p 3

[Article: "Extent To Be Determined Soon; Virus Abortion of Horses Spreads to Finland"]

[Text] Miscarriages by mares caused by contagious viral abortion have appeared for the first time in Finland since World War II.

The disease was detected during the first weeks in May at the Metsapirtti insemination station at Nastola, which was immediately placed under quarantine for 6 weeks.

"The extent of the epidemic will be determined when the taking of blood samples begins in a few weeks," said veterinary consultant Rolf Berger of the Ministry of Agriculture and Forestry. A mare ill of viral abortion gives birth prematurely, generally a few months after contracting the disease. According to Berger, artificial insemination in no way increases the risk of illness because viral abortion is spread in a fashion similar to that of the common cold, by stiking first in the respiratory organs.

"The disease has been encountered in Central Europe and it is fairly common also in Sweden and Denmark. It has apparently been introduced into Finland through racing horses that have participated in international competitions.

A horse stricken with viral abortion cannot be helped, because medications have no effect on the virus and no effective vaccine has yet been developed.

"Catastrophic proportions are not yet involved. We had already been prepared for the eventuality that the disease would spread to Finland. The matter is serious however in that it causes economic losses in those breeding stations that have large numbers of horses."

The viral abortion imparts only a weak immunity that protects a horse only through the following foaling.

# Quarantine Imposed

Helsinki UUSI SUOMI in Finnish 22 May 79 p 3

[Article: "Seven Dead in Nastola; New Virus Disease Preys on Foals"]

[Text] Seven foals have died of an alarming viral abortion disease at the Metsapirtti inseminating station in Nastola. The horses at the station have been placed in quarantine.

The deaths at Nastola provide the first concrete evidence that the disease has spread to Finland. The disease has existed for years in Sweden and elsewhere in Europe.

According to Olavi Oksanen, the Hame provincial veterinarian, it is possible that the disease has already spread to other parts of Finland as well. Mares occasionally foal prematurely and these instances in the past have not been suspected as viral abortion.

Seven of the 12 pregnant mares at the Metsapirtti station foaled premature stillbirths. There were five normal deliveries and one remains undelivered.

Quarantine was imposed at the Metsapirtti station 2 weeks ago. According to Oksanen, lifting of the quarantine is being considered following completion of studies of specimens from 130 horses at Vermo. There are numerous mares that were inseminated at Mastola throughout Finland and the taking of specimens from them has not yet begun.

5955

# NEWCASTLE DISEASE REPORTED IN SABAH

# Kuala Belait BORNEO BULLETIN in English 9 Jun 79 p 1

[Text]

SANDAKAN. — Between 20,000 and 30,000 chickens have died or have had to be killed in Sabah in the last two weeks following an outbreak of ranikhet or Newcastle disease.

The Sandakan area has been particularly badly hit with poultry farmers having to dispose of thousands of dead birds by burning them in pits with tar, kerosene or diesel.

But the Veterinary Department blames the outbreak of the disease on the complacent attitude of many poultry farmers who have not bothered to have their chickens vaccinated.

Senior veterinary officer Dr Lai Kong Namsaid because there had not been any serious cases of the disease in recent years farmers have been taking it easy and with the growth of much larger poultry farms it was difficult for a breeder to keep an accurate check on which chickens had been vaccinated.

A vaccination service was started by the department in 1950 and until the present outbreak there had only been a few cases of the disease reported.

Veterinary officer Dr Michael Kehoe confirmed that at least 20,000

birds had died but said he thought only targe farms had been hit because small poultry farmers tended to have their chickens vaccinated.

"Large-scale poultry breeders have the problem of rounding up thousands of birds for vaccination," Dr Kehon said, "and they often just cannot be bothered to do this. "They tell themselves that because the disease is not very common there is no danger of an epidemic," he added.

no danger of an epidemic," he added.

Dr Kehoe said as far as he knew the situation was now under control and reports of birds dying had stopped coming in.

Dr Lai said many farmers were reluctant to report deaths because they thought it would harm their reputation and his department was hampered because permission to enter farms was not always readily given.

Dr Lai stressed that the disease did not cause any serious health risk to humans but the chickens lost all their nutritional value and eating the meat or eggs could cause a slight eye infection.

Despite the deaths the price of eggs in Sandakan remains fairly stable, selling at between 25 and 27 cents each but the price of chickens in the market has risen alightly.

# BRIEFS

EQUINE ENCEPHALITIS CASE INVESTIGATED -- Regional authorities have been carefully investigating a possible case of equine encephalitis on a farm located in the Bruzual District (Chivacoa) in the area known as Guatanquire. The allegations made have been confirmed by the regional epidemiologist, Dr Victor Pulido, who traveled from San Felipe to Bruzual (Chivacoa) on numerous occasions and who found evidence to prove that what has been regarded as suspicious was in fact equine encephalitis, in addition to dealing with other cases under investigation. Seemingly, the blood samples sent to the SAS laboratories in Caracas and Maracay have not been examined so far, so that the results are not known. Yet there is a tendency to believe that they might turn into proof that the epizooty could flare up again at any time. Insofar as the region under review is concerned, some years ago an epidemic affected among persons and animals and it is now believed that it has flared up anew. Hence the interest of the sanitary authorities in determining what the situation is and their intention of asking that the results of the laboratory test be speeded up. [Text] [Caracas EL UNIVERSAL in Spanish 13 Jun 79 p 30] 7129

#### BRIEFS

LOCUST SITUATION UNDER CONTROL -- A communique from the office of the deputy minister of agriculture which was issued in the capital on Wednesday states that the plague of locusts which attacked Luanda province is completely under control. Following a spraying campaign in all areas of Luanda (with the exception of the Icolo, Bengo and Kissama municipalities and especially the areas around the Kwanza River, where, because of information about the adult stage of the locusts arriving too late, work is still in process), the situation is completely under control. In recent days, swarms of locusts were seen in the Kwanza-Sul, Benguela and Huila provinces but there were no damages to the crops. The situation in these areas is also under control, as expressed in the communique which gives the latest information on the locust situation for the period 1 to 30 June 1979. However, since "the locust plague cannot be definitively fought (...) it is natural that there are some localities where locusts have appeared without being detected by the population; we are therefore appealing to party and government organs, as well as to the entire population to transmit all information pertaining to the presence of locusts," the communique from the Ministry says. [Text] [Luanda JORNAL DE ANGOLA in Portuguese 6 Jul 79 p 1]

## MEASURES TAKEN TO FIGHT COFFEE RUST OUTBREAK

# Fumigation Begun

Quito EL TIEMPO in Spanish 15 Jun 79 p 12

[Text] Huaquillas, 13 June-In order to prevent the entry of coffee rust, all types of vehicles, both light and heavy, that are in circulation are being fumigated with sodium hypochlorite, thanks to the constant concern of engineer Roberto Feroud Crespo, chief of plant quarantine in Huaquillas, who is doing everything humanly possible because he does not have sufficient personnel with which to counter the possible entry of the dread disease. The personnel under his supervision are working wherever possible.

The vehicles are funigated in the presence of engineer Feroud Crespo, an individual who is rendering his assistance to keep the disease under control. The funigated vehicles are those carrying non-plant items, and we do not think that there is any reason to be inconvenienced by this work, which we can term a sacrifice instead of an annoyance. But we should not use obnoxious descriptions, which are not fitting. It is the duty of Ecuadoreans to obey, especially when the order comes from higher authorities.

#### Seminar Is Planned

We have been told that, in a few days, a highly important seminar on the coffee rust disease and others will be held. It has been reported to us that such seminars may possibly take place at the Remigio Gomez G. School and others, where the youth and the people as a whole may observe the serious threat of this dreadful disease entering the country. It has worried our coffee growers and the population, because many make their living from this type of work; and even the government itself and the merchants engaged in selling plant products are involved in preventing the possible entry of the disease.

#### Street Comments

Some ignorant citizens who do nothing but spread distrust are opposing this correct measure adopted by the Ministry of Agriculture and Livestock, and

have engaged in the disreputable task of spreading false rumors, something which is inappropriate. But we do know that there is no cooperation from the authorities to allow onions, garlic and grapes from entering freely across our borders. The minister's sacrifice is of no use when, on the other hand, stupid acts are being committed through bribery. The nation matters little to them.

#### Information Distributed

Guayaquil EL UNIVERSO in Spanish 27 Jun 79 p 10

[Text] In view of the danger of a likely attack of "rust" affecting Ecuador-ean coffee plantations, and since this crop is considered to have high priority both for the export economy and for the economy of the 40,000 families which depend on the crop, the INIAP [National Agricultural and Livestock Research Institute], in cooperation with the National Coffee Program, has published approximately 40,000 leaflets which have been distributed by the agents carrying out the program to all coffee producers, in order to instruct them in the areas of prevention and technology.

A total of 20,000 copies of the informative publication "The Threat of Coffee Rust," were delivered; as well as 10,000 copies of the bulletin "Combatting the Coffee Sprig Borer," and 10,000 copies of the technical bulletin "Nutrition of Robust Coffee in the Quevedo Area."

It is felt that this material, together with the instructive activity of the program's technicians, will be able to help somewhat in limiting the effects of this virtually unavoidable plague.

2909

#### BRIEFS

INSECT ATTACKS AFRICAN PALMS--Agricultural producers of African palms are highly disturbed by the devestating disease which is leveling their plantations located totally in the Santo Domingo de los Colorados area. The disease affecting the plantations manifests itself in the yellow color of the leaves of that plant, which causes the drastic drop in production, with the well-known economic and social consequences. It was learned that the National Agricultural and Livestock Research Institute (INIAP) is conducting an investigation to determine the cause of this disease, without results up to now, which will permit the combating of the disease or attenuation of the effects of same. It was learned that tests of this disease are being made in England, with research being conducted by Dr Turner, a British expert who was in the country to determine the causes of this disease. It was learned that the probable cause of this disease is an insect called "Sagalasa" which penetrates the root of the palm until it is destroyed. If this situation is not remedied the yields of these crops whose production constitutes a valuable raw material for the vegetable oil-extracting industry will be affected. [Text] [Guayaquil EL UNIVERSO in Spanish 12 Jun 79 p 24] 8143

## BRIEFS

POTATO BEETLE IN RADOM--The unfavorable conditions for the vegetation of potatoes, which occurred in the spring of this year, have resulted in the appearance of the potato beetle on the potato plantations in Radom Voivodship. Currently, phyto-sanitizing measures are being conducted, spraying the potato fields with insecticides. Such phyto-sanitizing measures are taking place on the fields in Promma village and are being performed by a brigade from the local Agricultural Circles Cooperative (SKR). Text / Warsaw GLOS PRACY in Polish 12 Jul 79 p 3/

CSO: 2600

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# END OF FICHE DATE FILMED 3 Aug 79